

In The U. S. Patent and Trademark Office

"Application to Patent"

Genus Species

Rhododendron hybrid

Varietal Denomination

'Roblec'

**Background of the Invention:**

The present invention relates to a new and distinct variety of evergreen azalea of the genus *Rhododendron* and a member of the Ericaceae family. This new azalea variety, hereinafter referred to as 'Roblec', was discovered by Robert Edward Lee of Transcend Nursery in July, 1995 in Independence, La. 'Roblec' originated from a planned cross hybridization between two selected breeding lines in a controlled breeding program in Independence, La. The value of this new cultivar lies in its unique blooming period, bloom color, bloom form, bloom size, and growth habit.

Asexual propagation of the new plant by cuttings has been under Mr. Lee's direction at the same location. The new plant retains its distinctive characteristics and reproduces true to type in successive generations. The plant cannot be reproduced true from seed.

### **Summary of the Invention:**

The following are the most outstanding and distinguishing characteristics of this new cultivar when grown under normal horticultural practices in Independence, LA.

1. The unique spring, summer, and fall blooming.
2. A pink flower color Red-Purple Group 73B with dotting color Red-Purple Group 67A.
3. Large, semi-double flowers ranging in size from 2 1/2" – 3" in diameter.
4. Easily propagated with semi - hardwood cuttings in late spring through the summer.
5. Fast growth rate under normal fertilization and moisture conditions.
6. Upright, dense and globose in nature.
7. Good specimen plant.
8. Desirable in planters.
9. Makes a very good hedge or screen.
10. Very good foundation plant for large buildings.
11. Does well as an under story plant in a woodland garden.
12. Hardy to Zone 7.
13. Attracts butterflies.

**Description of the Drawings:**

This new Azalea Hybrid variety is illustrated by the accompanying photographic prints in which:

1. The photograph at the top of the sheet is a close-up showing flower, foliage, and stem color as well as flower size and form.
2. The photograph at the bottom of the sheet shows the dense, upright and globose growth habit of a young three gallon plant.

The colors shown are as true as is reasonably possible to obtain by conventional photographic procedures. Colors in the photographs may appear different than actual colors due to light reflectance. The colors of the various plant parts are defined with reference to The Royal Horticultural Society Colour Chart. Description of colors in ordinary terms are presented where appropriate for clarity in meaning.

## Botanical Description of the Plant:

The following is a detailed description of the new variety of Azalea based on my observations made of 2 year old plants grown in 3 gallon containers in wholesale commercial production practices, in greenhouses, and in established landscape plantings in Independence, Louisiana.

## Distinctive Characteristics:

**Table 1**

Characteristic	'Schroeder's		<u>R.oldhamii</u>	
	'Roblec'	Pink Perfection'	'Fourth of July'	R. oldhamii
Height (Mature)	4-5'	2-3'	8-10'	8-10'
Width (Mature)	3-4'	3-4'	6-7'	6-7'
Flower Diameter	2 1/2-3"	1 1/2 - 2"	1 3/4-2 1/4"	1 3/4-2 1/4"
Flower Form	Semi-double	Semi-double	Single	Single
Flower Color	Red-Purple G. 73B	Red G.55A	Red G. 39A	Red G. 39A
Flowers per Terminal	3-5	2-3	2-4	2-4
Bloom Period	April	April>		Mid-May>Mid-June
" "	Late July>Frost	May	Late June>Frost	Sporadic > summer
Petal Number	11-21	8-12	5	5
Hardy Zone	7	6	7	8
Stamen Number	0-4	5	7-10	7-10
Stamen Type	Some Petaloid	Some Petaloid	Non-Petaloid	Non-Petaloid

The female, or seed parent, of 'Roblec' is the Azalea 'Shroeder's Pink Perfection'; a deep purplish pink, semi-double, hose-in-hose, mid-season blooming, compact grower. 'Shroeder's Pink Perfection' is an unpatented hybrid developed by H.R. Shroeder in Evansville, Indiana. Mr. Shroeder first introduced his hybrids in 1984. His goals were to develop cold-hardy compact azaleas with large single to double flowers. 'Shroeder's Pink Perfection' is the

result of the cross between the Kaempferi Hybrid 'Betty' and the Shammarello Hybrid 'Elsie Lee'.

The male, or pollen, parent is Rhododendron oldhamii 'Fourth of July' which originated from a R. oldhamii seed lot collected in 1968 by Dr. Hsu of Taiwan University. The seeds were collected at 850 meters elevation on Mount Tai Tun in Taiwan. Soon after this John Patrick of Oakland, California was visiting Taiwan collecting plant material of the Taiwanese Rhododendrons. He obtained a number of seedlings from Dr. Hsu and grew them in Oakland, CA. In 1972, Dr. John T. Thornton of Franklinton, LA. obtained one of the Rhododendron seedlings from Mr. Patrick. Dr. Thornton noticed in the next few years that this particular R. oldhamii plant was a perpetual bloomer from late June until frost on new growth. This plant produces two flushes of growth containing flowers. The second flush of growth overlaps the first flush producing a plant which blooms continuously. This differs from the species R. oldhamii which blooms from mid-May until mid-June and sporadically through the summer. Dr. Thornton subsequently named this plant R. oldhamii 'Fourth of July' in 1973.

The azalea 'Fourth of July' seems to be hardy to about 10 degrees F (zone 7). Temperatures below this cause dieback, but the plant readily recovers and blooms profusely the following summer. R. oldhamii is less hardy at zone 8.

Robert Edward Lee's hybridization program was conducted with emphasis on species that are not commonly found in the genetic make-up of the present day hybrids. The 'Fourth of July' cultivar which Mr. Lee obtained from Dr. Thornton in 1981 is a heavy summer and fall blooming plant, not like the Rhododendron Species Foundation form. The flower buds form on new growth and start blooming about July 1. Mr. Lee used this cultivar to cross with existing hybrids which have a tendency to bloom in the fall and which are also fairly hardy. As expected the resulting seedlings are heavy summer and fall bloomers with very impressive spring blooms also.

## **Classification**

**Botanical:** Rhododendron hybrid 'Roblec'

**Form:** Upright, dense, and rounded

**Height:** 4-5'

**Width:** 3-4'

**Growth Habit:** Upright, dense and globose. Fast growth rate under normal fertilization and moisture conditions.

**Growth Rate:** In a period of six years from a rooted cutting the plant reaches a height of 3 feet and a spread of 2 feet. The growth rate is normally about 6 to 8" per year; the plant reaches a height of 4 to 5' at maturity while maintaining a dense habit due to the abundant branch development.

**Foliage:** Alternate, simple, evergreen, pubescent, elliptic to broadly elliptic, and varying in size from 1 3/4" to 2 1/4" long and 7/8" to 1 1/8" wide. The margins are entire, with a petiole 3/16" to 5/16" long. Midveins and laterals are impressed on the upper leaf surface and prominent on the underside. The base of the leaf is cuneate to attenuate and the apex is acute to mucronate. The upper surface of the immature leaves is dull, pubescent, and is Yellow-Green Group 144A and the underside is Yellow-Green Group 146D, pubescent, and matte. The upper surface of the mature leaves is Yellow-Green Group 147A, dull and slightly pubescent and the underside is Yellow-Green Group 146B, matte, and pubescent. The upper end of the mid-rib and veins is Yellow-Green Group 146C. New growth is pubescent. These hairs are initially soft and white and cover both sides of the leaf with a higher concentration on the petioles and

veins. They are slightly curled, flat, and range in length from 1/64" to 1/32". As the growth matures much of the leaf pubescence is lost; however, the stems, petioles, and leaf veins retain this pubescence which becomes more setaceous and darker in color (Brown Group 200B) through the growing season.

In 2001, the date of initial spring growth was March 8, in Independence, LA. After the initial spring flush there was almost continuous growth until that fall ending November 5, also in Independence, LA. When grown in full sun, the internode length of this plant is 3/8" to 3/4"; when grown in light shade the internode length is 5/8" to 1". As would be expected a plant grown in shade results in a taller, less dense plant with larger leaves.

The average length of terminal growth of the initial spring flush is about 5" for a plant in full sun and about 7" when grown in shade. This growth should not be trimmed since it will produce flowers starting in late July. As the plant continues to grow through the summer and fall more flower buds are produced, which mature and bloom until frost. This remaining growth produces about 4" to 5" of height. As cool weather approaches, some of the flower buds become dormant. These buds bloom in April of the next year.

**Stems:** The young stems, petioles, and lower end of the mid-ribs are Greyed-Purple Group 184B and densely clothed with spreading white glandular hairs. As the stems mature they become Yellow-Green Group 152B and by the second growing season they are Greyed-Green Group 197B, glabrous and rugose. The pith is solid and uniform. Young and older stems are densely branched.



**Buds:** Tight buds at 1/2" are ovate and acuminate Yellow-Green Group 146D with a hairy pubescence Brown Group 200A. The buds are borne in clusters of 3 to 5, and are sheathed by a pair of modified leaf bracts which are from 1/4" to 1/2" long, persistent, and Yellow-Green Group 147A. The pedicel is 3/8" to 5/8" long, pubescent, and Red Group 54A. The calyx is 3/16" to 1/4" long, Yellow-Green Group 144C, funnel shaped, persistent, and pubescent. The five imbricated sepals are lanceolate and joined at the base to form a cup. As the buds swell the bud sheath matures to a Greyed-Orange Group 165A, falls off, and reveals the flower color Red-Purple Group 73B.

**Flowers:** Perfect, semi-double, Red-Purple Group 73B (upper surface and undersurface), glabrous, open funnel shaped, 2 1/2" to 3" in diameter by 1 3/4" to 2 1/4" in depth, borne on current season's growth, non-fragrant; they last on the plant in the garden 5 to 6 days. There are five true petals which are fused at the base, elliptic, and have wavy margins. These petals are 1 3/4" to 2 1/4" long, 3/4" to 1 1/4" wide, and have rounded apexes and entire margins. Three out of five petals are dotted with Red-Purple Group 67A. There are 0 to 4 non-petaloid stamens which are 1/2" to 1 1/4" long. The filaments are Red-Purple Group 64D, the anthers are Red-Purple Group 59A, and the pollen matures to Yellow Group 11B. The 6 to 16 petaloid stamens are from 1/4" to 1 1/2" long, 1/4" to 7/8" wide, and odd shaped. The margins are entire and the apexes rounded. The uppermost petaloid stamens are dotted with Red-Purple Group 67A. The pistil is single, non-petaloid, 1 1/2" to 1 3/4" long and Red-Purple Group 73A. The ovary is densely glandular-setose and has five locules.

The capsule matures in about 5 months, in Independence, LA., to about 1/4" to 1/2" long; it has a persistent style, is Yellow-Green Group 147A, and contains from 100 to 400 nonwinged seeds. Normally fruit set is not heavy. There is a 2 to 3 week flowering period in April in Independence, LA. Flowering resumes in July as the new buds mature and continues until frost which can be as late as November or December in Independence, LA. Azaleas blooming at this time of year attract butterflies in profusion.

**Culture:** Grows well in a wide range of conditions, tolerates sun to shade.

Prefers a moist, well-drained soil that is rich in organic matter. Responds well to mulching and medium applications of fertilizer; prefers ph 5.0 to 5.5. Very little pruning is needed; adaptable to container and above ground planters; makes a good foundation plant or informal hedge with excellent foliage and flower contrast. Ideal for coastal regions and warmer parts of Piedmont. Propagated with semi-hardwood cuttings in late spring through the summer.

**Pests:** Lace wing and spider mites can be a problem.